

## XP-002236298

AN - 2002-220344 [28]

AP - JP20000365185 20001130

CPY - HITB

DC - A14 A21 A81 A85 G03 L03 U11

FS - CPI;EPI

IC - C09J7/02 ; C09J119/00 ; C09J163/00 ; C09J201/00

MC - A04-F01A1 A04-F06E6 A07-A04A A08-C01 A08-D01 A11-C01C A12-A05A

A12-A05C A12-E07C G03-B02D1 G03-B02E2 L04-C17D

- U11-A09 U11-D03B3 U11-E02A3

PA - (HITB) HITACHI CHEM CO LTD

PN - JP2001220571 A 20010814 DW200228 C09J201/00 005pp

PR - JP19990339037 19991130

XA - C2002-067365

XIC - C09J-007/02 ; C09J-119/00 ; C09J-163/00 ; C09J-201/00

XP - N2002-169092

AB - JP2001220571 NOVELTY - Adhesive composition (P1) comprises a mixture of two kinds of resins, (A) and (B), that cause phase separation at the B stage of curing. Resin (A) has a weight average molecular weight (Mw) less than or equal to 10,000 at uncured state and forms a dispersed phase in the inside of the B stage resin mixture.

- DETAILED DESCRIPTION - Resin (B) has a (Mw) greater than or equal to 100,000 at uncured state and forms a continuous phase at the B stage of curing. The volume ratio of (dispersed phase)/(continuous phase) is 1/(0.5-5).

- INDEPENDENT CLAIMS are also included for: (1) an adhesive film (P2) that is obtained by molding (P1) into films; and (2) a wiring substrate for mounting semiconductor chips (P3) in which (P2) has been laminated on the surface of a wiring substrate.

- USE - The adhesive composition (P1) is suitable as an adhesive for bonding semiconductor chips onto wiring substrates, particularly for manufacture of adhesive film (P2). (P2) is suitable for manufacture of a wiring substrate for mounting semiconductor chips (P3). (P3) is suitable for manufacture of semiconductor apparatuses.

- ADVANTAGE - The adhesive composition (P1) and adhesive film (P2) have high flowing properties and low tack, resultantly good workability and can realize bonding with high reliability without generation of voids.

- (Dwg.0/0)

IW - ADHESIVE COMPOSITION ADHESIVE FILM WIRE SUBSTRATE MOUNT SEMICONDUCTOR CHIP COMPRISE MIXTURE TWO KIND RESIN CAUSE PHASE SEPARATE STAGE CURE

IKW - ADHESIVE COMPOSITION ADHESIVE FILM WIRE SUBSTRATE MOUNT SEMICONDUCTOR CHIP COMPRISE MIXTURE TWO KIND RESIN CAUSE PHASE SEPARATE STAGE CURE

NC - 001

OPD - 1999-11-30

ORD - 2001-08-14

PAW - (HITB) HITACHI CHEM CO LTD

TI - Adhesive composition, used for adhesive film and wiring substrate for mounting semiconductor chips, comprises a mixture of two kinds of resins that cause phase separation at the B stage of curing

A01 - [001] 018 ; P0464-R D01 D22 D42 F47 ; S9999 S1285-R ; S9999 S1581 ;

S9999 S1434 ; L9999 L2391 ; L9999 L2073 ; M9999 M2073

- [002] 018 ; P0088-R ; H0124-R ; S9999 S1296 S1285 ; S9999 S1285-R ;

S9999 S1581 ; S9999 S1434

- [003] 018 ; ND01 ; ND04 ; B9999 B4988-R B4977 B4740 ; B9999 B5027  
B5016 B4977 B4740 ; K9756-R K9745 ; K9778 K9745 ; Q9999 Q7476 Q7330  
; Q9999 Q7374-R Q7330 ; Q9999 Q7818-R ; N9999 N6440-R ; N9999  
N7192 N7023 ; B9999 B5016-R B4977 B4740 ; B9999 B5094 B4977 B4740 ;  
B9999 B5301 B5298 B5276 ; B9999 B3623 B3554
- [004] 018 ; A999 A157-R